

AMENDMENTS TO THE CLAIMS (THIS LISTING REPLACES ALL PRIOR LISTINGS):

1. (Currently Amended) A method comprising
receiving data packets at a communications node,
associating each of the received data packets with a service class and a forward link
transmission rate,
transmitting outbound packets corresponding to the received data packets to recipients,
and
controlling an order in which the outbound packets are transmitted to the recipients based
on the forward link transmission rate ~~rates of transmission of the outbound packets~~ and the
service class associated with each of the received data packets corresponding to the outbound
packets.
2. (Previously Presented) The method of claim 1 in which the outbound packets
comprise physical layer packets.
3. (Currently Amended) The method of claim 1 in which the forward link
transmission ~~rates of transmission~~ are controlled based on a time-division multiplexing
algorithm.
4. (Original) The method of claim 1 in which the node comprises a radio node of a
communications protocol.
5. (Original) The method of claim 4 in which the communications protocol
comprises HDR.
6. (Previously Presented) The method of claim 1 in which each service class is one
of a set of different service classes that conforms to a differentiated services architecture.
7. (Original) The method of claim 6 in which the differentiated services architecture
comprises DiffServ.
8. (Original) The method of claim 1 in which the service classes comprise at least
one expedited forwarding class and at least one assured forwarding class.
9. (Previously Presented) The method of claim 1 also including receiving a user-
defined minimum average forwarding percentage rate for at least one of the service classes.

10. (Previously Presented) The method of claim 9 in which the percentage comprises a percentage of a total bandwidth of a link on which the outbound packets are transmitted.

11. (Currently Amended) The method of claim 1 in which the forward link transmission rate of transmission of an outbound packet is determined by recipient.

12. (Currently Amended) The method of claim 11 in which the forward link transmission rates are sent by the recipients using a feedback channel to the node.

13. (Previously Presented) The method of claim 1 in which the order in which the packets are transmitted is controlled by two-level scheduling including a class level in which ordering is determined among the classes of service and a recipient level in which ordering is determined among the recipients associated with each class.

14. (Original) The method of claim 13 in which the recipient level uses the Qualcomm algorithm.

15. (Original) The method of claim 13 in which the class level scheduling is based on at least one of the following for each of the classes: a configured minimum average forwarding rate percentage for the class, an actual forwarding rate percentage recently received by the class, and a channel quality for the recipients that belong to the class and are selected to receive service by the recipient level scheduling.

16. (Original) The method of claim 13 in which the class level scheduling is done over a predetermined length window of time slots.

17. (Original) The method of claim 13 in which the class level scheduling includes a weighted round robin scheduling algorithm in which the weights correspond to channel quality of the recipients belonging to the respective classes.

18. (Previously Presented) The method of claim 13 in which the class level scheduling is based at least in part on a planned selection at the recipient level within each class.

19. (Original) The method of claim 18 in which the class level scheduling is based on a metric scaled by different scaling factors for different service classes.

20. (Original) The method of claim 19 in which the scaling factors for all service classes are adaptively adjusted to meet the MAFRP for the service classes.

21. (Original) The method of claim 18 in which the class level scheduling is based on a metric which is adaptively adjusted to meet the MAFRP for the service classes.

22. (Original) The method of claim 13 in which the class level scheduling selects a class from among a subset of the classes.

23. (Previously Presented) The method of claim 22 in which the members of the subset of classes are determined by pre-assigned schedule times.

24. (Original) The method of claim 13 in which the recipient level scheduling selects a recipient from among a subset of the recipients.

25. (Previously Presented) The method of claim 24 in which the members of the subset of recipients are determined by pre-assigned schedule times.

26. (Currently Amended) Apparatus comprising
a communications node configured to receive data packets, associate each of the received data packets with a service class and a forward link transmission rate, transmit outbound packets corresponding to the received data packets to recipients, and control an order in which the outbound packets are transmitted to the recipients based on the forward link transmission rate ~~rates of transmission of the outbound packets~~ and the service class associated with each of the received data packets corresponding to the outbound packets.

27. (Currently Amended) A method comprising
receiving from a network operator values representing minimum ~~average forwarding rate~~ ~~percentages performances~~ for each of more than one distinct classes of service associated with transmission of packets from a radio node of a network to recipients, and
scheduling packets for transmission among the distinct classes, the scheduling being based on a quality of an air-link channel that serves the recipient when the packet is to be transmitted and the received values. minimum forwarding performance for each of the classes.

28. (Previously Presented) The method of claim 1 in which the rate of transmission of each of the outbound packets varies based on a quality of a channel that serves the recipient of the outbound packet.

29. (Previously Presented) The method of claim 28 in which the rate of transmission of each of the outbound packets varies based on an instantaneous quality of a channel that serves the recipient when the outbound packet is to be transmitted.

30. (Previously Presented) The method of claim 27 in which the percentage comprises a percentage of a total bandwidth of a link on which the packets are transmitted.

31. (Previously Presented) The method of claim 27 further comprising controlling an order in which the packets are transmitted to the recipients based on rates of transmission and classes of service of the packets.

32. (Previously Presented) The method of claim 31 in which the order in which the packets are transmitted is controlled by two-level scheduling including a class level in which ordering is determined among the classes of service and a recipient level in which ordering is determined among the recipients associated with each class.

33. (Previously Presented) The method of claim 31 in which the packets are scheduled for transmission based on at least one of the following for each of the classes: a configured minimum average forwarding rate percentage for the class, an actual forwarding rate percentage recently received by the class, and a channel quality for the recipients that belong to the class and are selected to receive service by the recipient level scheduling.